



Planning and Quality Assurance Affairs

Form (A)

Course Specifications

General Information

Pharmacology (1) Course name PHPT4310 Course number **Faculty Department** Major Needs **Course type Course level** 3 **Credit hours (theoretical)** 0 **Credit hours (practical) Course Prerequisites**

Course Objectives

- To teach students the importance of drug usage in disease therapy.
- Students should evaluate drug benefits vs drug adverse effect.
- Students should be able to determine best drugs for disease therapy.

Intended Learning Outcomes

Knowledge and Understanding	* a- students should learn the nature of drugs, and their sources.	
	* b- students should learn the various ways of drugs intake.	
	* c- Students should learn about the biological variability of drug action.	
	* d- Students should learn about drug safety vs drug toxicity.	
	* e- Students should know how drugs produce their action (MOA).	
	 f- Students should know the activity of the autonomic nervous system, and how drugs influence its action. 	
	 g- Students should learn how drugs alter sympathetic nerve activity on various organs and in disease states. 	
	 h- Students should learn about drugs that influence Parasym.N.system activity on various organs and disease. 	

Course Contents

- 1 Part I- GENERAL PRINCIPLES OF PHARMACOLOGY
- 2 Introduction to General Pharmacology
- 3 Dose-Response Relationships
- 4 Drug Receptors
- 5 Signal Transduction Systems
- 6 Pharmacogenetics and Pharmacogenomics
- 7 Part II- AUTONOMIC NERVOUS SYSTEM AND NEUROMUSCULAR JUNCTION
- 8 Functional and Neurochemical Organization of the Autonomic Nervous System
- 9 _ Cholinergic Agonists and Antagonists
- 10 Adrenergic Receptor Agonists
- 11 Adrenergic Receptor Antagonists
- 12 Neuromuscular transmission and Drugs (Muscle Relaxants)
- 13 Part III- MEDIATORS AND MODIFIERS OF TSSUE
- 14 The Eicosanoids
- 15 Anti-inflammatory Analgesics
- 16 Autacoids
- 17 Histamine and Antihistamines

Students Assessment

Assessment Method	<u>TIME</u>	<u>MARKS</u>
Midterm Exams Reports, presentations	one hour	50%
final exam	two hours	50%

Books and References

Course note	[1] The Pharmacological Basis of Therapeutics By Goodman and Gilman's 12th Edition (2014)			
	[2] Pharmacology By Rang, H.P; Dale, M.M; Ritter, J.M. 6th Edition, (2007)			
	[3] Basic and clinical Pharmacology By Bertram G. katzung. 11th Edition, (2009)			
	[4] Modern Pharmacology With Clinical Applications By Charles, R.C. and Robert, R. S. 6th Edition, (2003).			
	[5] Basic Pharmacology: Understanding Drug Action and Reactions. By Maria A Hernandez;Appu Rathinavelu 1st Edition, (2006)			
	[6] Brody's Human Pharmacology. By By Lynn Wecker; PHD; Lynn M Crespo; George Dunaway; Carl Faingold and Stephanie Watts. 5th Edition. (2010)			